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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/511,526	02/23/2000	Barry W. Jones	99ec019/76257	4196

7590 03/03/2003

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EXAMINER

PHILPOTT, JUSTIN M

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 03/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/511,526

Applicant(s)

JONES, BARRY W.

Examiner

Justin M Philpott

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 55 and 56 is/are allowed.
- 6) ☒ Claim(s) 1-16 and 22-45 is/are rejected.
- 7) ☒ Claim(s) 17-21 and 46-54 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: “included” (page 6, line 24) should be changed to “include”; and reference to numerical parameters (particularly “24” and “48” from page 8 – page 11) which are numerically identical to labeled elements of the figures should be written in word form so as to avoid mistaking the numbers as reference to labeled elements of the figures. For example, “a first 24 successive memory locations of memory space” (page 8, lines 4-5) should be changed to “a first twenty-four successive memory locations of memory space” because “24” is used in Figure 1 to identify the address control block. Appropriate correction is required.

Claim Objections

2. Claims 8, 9, 28, 29, 41 and 42 are objected to because of the following informalities: the claims recite the term “output of the counter”, and while it appears Applicant is most likely referring to the second counter, it is not completely clear. Thus, Applicant is requested to insert the term “second”, if appropriate, between “the” and “counter”.

3. Claim 12 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Particularly, claim 12 consists of the redundant statement: “defining the second T-carrier as a second T-carrier”. Appropriate correction is required.

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4. Claim 18 is objected to because of the following informalities: a linking phrase is missing between the terms “wherein the step of compressing the information from the successive time slots of the first T-carrier” and “as both compressed and uncompressed versions in the predetermined memory locations of the memory device”. Appropriate correction is required.
5. Claims 43 and 44 are objected to because it appears they should be written to depend upon claim 35, and not claim 34. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8 and 9 recite the limitation “of the lookup table” in claim 7. There is insufficient antecedent basis for this limitation in the claim. Applicant may overcome this rejection by amending claim 6 to be dependent upon claim 5 and not claim 1.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-3, 5-7, 10-16, 22, 23, 25-27, 30-40 and 43-45 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,841,771 to Irwin et al.

Regarding claims 1, 16, 35 and 45, Irwin teaches a method of exchanging information between at least some slots of a first T-carrier and some other non-coincidental slots of a second T-carrier (see col. 14, lines 10-20 and FIGS. 5-7), comprising the steps of: exchanging information between successive slots of the first T-carrier and respective predetermined memory locations within a memory device (see col. 48, lines 59-63 and col. 15, lines 12-63, particularly lines 28-30), and exchanging information between successive slots of the second T-carrier and at least some of the predetermined locations in memory of the first T-carrier based upon a channel exchange list (see col. 48, line 65 – col. 49, line 7, and channel connection mapping in col. 43, lines 36-51) relating at least some channels of the first T-carrier to at least some other channels of the second T-carrier.

Regarding claims 2, 22 and 36, Irwin further teaches incrementing a first counter (write counter 221 in FIG. 3) coincident with a slot progression of the first T-carrier (col. 11, lines 8-10).

Regarding claims 3, 23 and 37, Irwin further teaches resetting the first counter (reset input 223 in FIG. 3) upon detecting a first slot of a repeating multi-frame of the first T-carrier (col. 11, lines 10-13).

Regarding claims 5, 25 and 38, Irwin teaches a channel-exchange list (list of addresses, see col. 43, lines 36-51) provided by a channel connection mapping, i.e. a look-up table.

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Regarding claims 6, 26 and 39, Irwin further teaches incrementing a second counter (read counter 225 in FIG. 3) coincident with a slot progression of the second T-carrier (col. 11, lines 25-29).

Regarding claims 7, 27 and 40, Irwin further teaches resetting the second counter (counter reset 227) upon detecting a first slot of a repeating multi-frame of the second T-carrier (col. 11, lines 29-32).

Regarding claims 10-12, 30, 31 and 43, Irwin further teaches the first T-carrier as a plurality of T-carriers (see "any of the 1-n lines 415", col. 15, lines 25-26 and FIG. 6).

Regarding claims 13 and 32, Irwin further teaches coupling the second T-carrier to a T-carrier interface device (ports 511-517, see FIGS. 7 and 9).

Regarding claims 14 and 33, Irwin further teaches locating the plurality of predetermined memory locations in a plurality of memory devices (buffer memory 560 and DS0 memory 520 in FIG. 7).

Regarding claims 15, 34 and 44, Irwin further teaches multiplexing the information (see MUX 411 and DEMUX 412 in FIG. 6).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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11. Claims 4, 8, 9, 24, 28, 29, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Irwin.

Regarding claims 4, 8, 9, 24, 28, 29, 41 and 42, Irwin teaches the method as discussed above regarding claims 1, 16 and 35, however, does not specifically disclose determining the predetermined memory locations of the first or second T-carrier by adding an output of the first or second counter to a base memory address. Rather, Irwin teaches receiving read/write addresses at a memory controller, wherein the addresses are used as memory pointers each identifying a specific block of memory (col. 17, lines 45-57). That is, Irwin teaches an incoming header (A) is examined in order to fetch a memory pointer (P) that identifies the location for storing the incoming cell payload within the memory (col. 18, lines 1-19). By including a cell table (481, see FIG. 6) comprising the incoming header (A) coupled with the first counter (write counter 424, see also col. 16, lines 10-11), the predetermined memory locations (specific blocks of memory) are determined. Thus, Irwin clearly suggests adding an output of the first or second counter to a base memory address to determine the predetermined memory locations of the first or second T-carrier by teaching coupling a counter (424) with a base address (A, P) to determine the memory locations (specific blocks of memory) of the first T-carrier. Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to add an output of the first or second counter to a base memory address to determine the predetermined memory locations of the first or second T-carrier in the method of Irwin.

Allowable Subject Matter

12. Claims 17-21 and 46-54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
13. Claims 55 and 56 are allowed.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 3,920,916 to Brightman et al. discloses a digital switching network having send and receive memory for exchanging time divided multiplex signals,

U.S. Patent No. 4,839,888 to Baltz et al. discloses a digital time division multiplex telephone subscriber connection system, and

U.S. Patent No. 5,862,136 to Irwin discloses a telecommunications apparatus for transporting ATM cells with reduced transport delay.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M Philpott whose telephone number is 703.305.7357. The examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on 703.308.6602. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703.872.9314 for regular communications and 703.872.9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.305.4750.

Justin M Philpott



February 13, 2003



HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800